

CLASS 705, DATA PROCESSING: FINANCIAL, BUSINESS PRACTICE, MANAGEMENT, OR COST/PRICE DETERMINATION

SECTION I - CLASS DEFINITION

This is the generic class for apparatus and corresponding methods for performing data processing operations, in which there is a significant change in the data or for performing calculation operations wherein the apparatus or method is uniquely designed for or utilized in the practice, administration, or management of an enterprise, or in the processing of financial data.

This class also provides for apparatus and corresponding methods for performing data processing or calculating operations in which a charge for goods or services is determined.

This class additionally provides for subject matter described in the two paragraphs above in combination with cryptographic apparatus or method.

SCOPE OF THE CLASS

1. The arrangements in this class are generally used for problems relating to administration of an organization, commodities or financial transactions.
2. Mere designation of an arrangement as a “business machine” or a document as a “business form” or “business chart” without any particular business function will not cause classification in this class or its subclasses.
3. For classification herein, there must be significant claim recitation of the data processing system or calculating computer and only nominal claim recitation of any external art environment. Significantly claimed apparatus external to this class, claimed in combination with apparatus under the class definition, which perform data processing or calculation operations are classified in the class appropriate to the external device unless specifically excluded therefrom.
4. Nominally claimed apparatus external to this class in combination with apparatus under the class definition is classified in this class unless provided for in the appropriate external class.
5. In view of the nature of the subject matter included herein, consideration of the classification schedule for the diverse art or environment is necessary for proper search.

OTHER CLASSIFICATION SYSTEMS

Each subclass definition may contain an OTHER CLASSIFICATION SYSTEMS listing that is to be used for informational purposes only. These classification listings may change at any time after their publication and are therefore not guaranteed to be current. In addition, the classification listing does not necessarily indicate the sole relationship between the U.S. Patent Classification System and foreign classifications. Even where a single classification is listed for a single U.S. subclass, a one-to-one correlation should not be inferred. As a result, information contained therein is considered to be only a guide to related subject matter.

Types of other classification systems may include:

- IPC⁷, which indicates an International Patent Classification (seventh edition) of the World Intellectual Property Organization (WIPO),
- JPO/FI, which indicates the Japanese Patent Office and its File Index (FI is a subdivision of the IPC with related subject matter) classifications, or
- European Patent Classification (ECLA), which indicates the European Patent Office's classification and also further subdivides the IPC into related subject matter, or
- Derwent, which indicates a classification from the Derwent Classification System.

SECTION II - REFERENCES TO OTHER CLASSES

SEE OR SEARCH CLASS:

- 177, Weighing Scales, subclasses 25.11+ for a computerized scale.
- 186, Merchandising, various subclasses for customer service methods and apparatus in a variety of areas including banking, restaurant and stores.
- 235, Registers, various subclasses for basic machines and associated indicating mechanisms for ascertaining the number of movements of various devices and machines, plus machines made from these basic machines alone (e.g., cash registers, voting machines), and in combination with various perfecting features, such as printers and recording means. In

- addition, search Class 235 for various data bearing record controlled systems. Search subclasses 375 through 386 for a system having a detail of a record-sensing device in combination with a system utilized for banking, determining credit, maintaining an inventory, access control, vending, voting, time or operations analysis and having no more than a nominal recitation of a computer or data processing arrangement. Search subclasses 7+ for cash register; and subclass 61 for mechanically computing a cost/price ratio. Note that a nominally claimed record or card sensor is considered to be a peripheral of the data processing system.
- 283, Printed Matter, various subclasses for business forms and methods of using such forms.
- 307, Electrical Transmission or Interconnection Systems, various subclasses for generic residual electrical transmission or interconnection systems and miscellaneous circuits.
- 340, Communications: Electrical, various subclasses for residual electrical communication systems, subclass 5.1-5.92 for communication details including authorization, vending, credit and access control; and see related classes elsewhere; particularly subclasses 5.4 -5.42 for credit authorization control, and subclasses 5.9-5.92 for intelligence comparison for commodity controlling (e.g., vending).
- 341, Coded Data Generation or Conversion, various subclasses for electrical pulse and digital code conversion.
- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 418 through 475 for data presentation/computer graphics processing; subclasses 581-618 for data presentation processing; and subclasses 1.1-111 for the selective control of two or more light generating or light controlling display elements in accordance with a received image signal.
- 359, Optics: Systems (including Communications) and Elements, subclasses 107+ for an optical computing arrangement.
- 360, Dynamic Magnetic Information Storage or Retrieval, which is an integral part of Class 369 following subclass 18, for record carriers and systems wherein information is stored and retrieved by interaction with a medium and there is relative motion between a medium and a transducer, for example, magnetic disk drive devices and control thereof, per se.
- 365, Static Information Storage and Retrieval, various subclasses for addressable static singular storage elements or plural singular storage elements of the same type.
- 369, Dynamic Information Storage or Retrieval, various subclasses for record carriers and systems wherein information is stored and retrieved by interaction with a medium and there is relative motion between a medium and a transducer.
- 370, Multiplex Communications, various subclasses for generic multiplexing and demultiplexing systems.
- 371, Error Detection/Correction and Fault Detection/Recovery, various subclasses for generic electrical pulse or pulse coded data error detection and correction.
- 375, Pulse or Digital Communications, various subclasses for generic pulse or digital communication systems.
- 377, Electrical Pulse Counters, Pulse Dividers, or Shift Registers: Circuits and Systems, various subclasses for generic circuits for pulse counting.
- 379, Telephonic Communications, various subclasses for two-way electrical communication of intelligible audio information of arbitrary content over a link including an electrical conductor. In addition, search subclasses 111 through 132 for a computer controlled telephone traffic and charge determining arrangement; subclass 284 for a processor controlled central switching arrangement.
- 380, Cryptography, appropriate subclasses for cryptographic apparatus or method in general and foreign art collections FOR 103 through FOR 150 for related foreign patents/nonpatent literature.
- 382, Image Analysis, appropriate subclasses for operations performed on image data with the aim of measuring a characteristic of an image, detecting variations, detecting structures, or transforming the image data, and for procedures for analyzing and categorizing patterns present in image data.
- 395, Information Processing System Organization, subclasses 180+ for reliability and availability in a digital data processing system; subclasses 200.01+ multicomputer data transferring.
- 434, Education and Demonstration, subclasses 107 through 110, 219+ and 306 for education or demonstration of business or economics, occupations and voting, subclasses 322+ for question or problem eliciting response.

- 463, Amusement Devices: Games, subclasses 1+, when there is a recitation (according to paragraph 3, under Scope of the Class, in the Class Definition of this class (705)) of a method or apparatus for moving or processing information specified as game or contest information, especially subclasses 16+, where game or contest information relates to a chance-type game (i.e., one that involves an award or prize based upon the occurrence of a chance happening or event; e.g., lottery, keno, slot machine, etc.). However, in order for the specified information to be considered significant for placement in Class 463, there must be significant game processing. For example, the mere printing of a selected lottery number is not significant unless there is also included an element of a game for Class 463 (e.g., a determination of whether the number is a winning number, such as by lot matching, a determination of an award or prize value associated with a number, etc.). A “coupon” or price adjustment given to a patron based upon an item purchased or another predetermined or nonrandom criteria is not considered to be a chance event or happening appropriate for Class 463.
- 700, Data Processing: Generic Control Systems or Specific Applications, subclasses 90 through 306 for devices or methods for controlling the processing or manufacturing of, or being responsive to a physical or mechanical condition of, a product or material, and, subclasses 245-264 for robot control.
- 704, Data Processing: Speech Signal Processing, Linguistics, Language Translation, and Audio Compression/Decompression, subclasses 231+ for a speech recognition system.
- 708, Electrical Computers: Arithmetic Processing and Calculating, subclasses 100+ for electrical digital calculating computer combined with diverse art device such as a checkbook or calendar or with inputs or outputs specialized for a particular environment including business.
- 713, Electrical Computers and Digital Processing Systems: Support, subclasses 150 through 194 for cryptographic computer and digital processing system support and foreign art collections FOR 123 and FOR 125 for related foreign patents/nonpatent literature.
- 902, Electronic Funds Transfer, for art collections including a detail of a security measure, an ATM machine, a terminal or an identifier used in an electronic funds transfer.

SECTION III - REFERENCES TO OTHER CLASSIFICATION SYSTEMS

IPC G06F, for electric digital processing.

ECLA G06F, for electric digital data processing.

Derwent T01, for digital computers.

SECTION IV - GLOSSARY

ARRANGEMENT

Either a device or a method of use of a device for performing the indicated process.

CALCULATING OPERATIONS

Arithmetic or some limited logic operations performed upon or with signals representing numbers or values.

COMPUTER

A machine that inputs data, processes data, stores data, and outputs data.

CRYPTOGRAPHY

Secret information storage or communication. This includes equipment or process which (a) conceals or obscures intelligible information by transforming such information so as to make the information unintelligible to a casual or unauthorized recipient, or (b) extracts intelligible information from such a concealed representation, including breaking of unknown codes and messages.

DATA

Representation of information in a coded manner suitable for communication, interpretation, or processing.

DATA PROCESSING

(For the purpose of this class) A systematic operation on data in accordance with a set of rules which results in a significant change in the data.

DEVICE

An assemblage of components at a single location or

which may have its several components at geos:graphically distinct locations, i.e., a network.

ENTERPRISE

A conventional business organization, a governmental organization or a nonprofit organization.

KEY

A formula, word or signal used to define a code in encryption or decryption of the information. Such a signal is often a digital signal having a predetermined or pseudorandom content

PRACTICE

A function directly related to the commercial activity of an enterprise (e.g. the exchange, buying or selling of commodities).

This class additionally provides for subject matter described in the two paragraphs above in combination with cryptographic apparatus or method.

SUBCLASSES

1 AUTOMATED ELECTRICAL FINANCIAL OR BUSINESS PRACTICE OR MANAGEMENT ARRANGEMENT:

This subclass is indented under the class definition. Subject matter wherein an electrical apparatus and its corresponding methods perform the data processing operations, in which there is a significant change in the data or for performing calculation operations wherein the apparatus or method is uniquely designed for or utilized in the practice, administration, or management of an enterprise, or in the processing of financial data.

- (1) Note. The term "arrangement" as used in this and its indented subclasses refers to either a device or to a method of use of a device for performing the indicated process. Further, a device may be an assemblage of components at a single location or may have its several components at geographically distinct locations, i.e., a network.
- (2) Note. The term "enterprise" as used in this and its indented subclasses is intended to include governmental and

nonprofit organizations, as well as conventional business organizations.

- (3) Note. The arrangements in this and its indented subclasses are generally used for problems relating to administration of an organization, commodities, financial transactions, or recreation.
- (4) Note. Mere designation of an arrangement as a "business machine" or a document as a "business form" or "business chart" without any particular business function will not cause classification in this or its indented subclasses.

SEE OR SEARCH THIS CLASS, SUBCLASS:

50, through 80 for business processing using cryptography.

SEE OR SEARCH CLASS:

- 235, Registers, subclasses 379 through 383 and 385 for a system having a detail of a record-sensing device in combination with a system utilized for banking, determining credit or maintaining an inventory, and having no more than a nominal recitation of a computer or data processing arrangement. Note that a nominally claimed record or card sensor is considered to be a peripheral of the data processing system.
- 379, Telephonic Communications, 111-132 for a computer controlled telephone traffic and charge determining arrangement; subclass 284 for a processor controlled central switching arrangement.
- 463, Amusement Devices: Games, subclasses 1+, when there is a recitation (according to the (3) Note of Section III of the Class 705 Definition) of a method or apparatus for moving or processing information specified as game or contest information, especially subclasses 16+, where game or contest information relates to a chance-type game (i.e., one that involves an award or prize based upon the occurrence of a chance happening or event; e.g., lottery, keno, slot machine, etc.). However, in order for

the specified information to be considered significant for placement in Class 463, there must be significant game processing. For example, the mere printing of a selected lottery number is not significant unless there is also included an element of a game for Class 463 (e.g., a determination of whether the number is a winning number, such as by lot matching, a determination of an award or prize value associated with a number, etc.). A "coupon" or price adjustment given to a patron based upon an item purchased or another predetermined or nonrandom criteria is not considered to be a chance event or happening appropriate for Class 463.

700, Data Processing: Generic Control Systems or Specific Applications, subclasses 90 through 306 for a device which either controls the processing of, or is responsive to a physical or mechanical condition of a product or material.

OTHER CLASSIFICATION SYSTEMS:

IPC⁷ G06F 17/60, for administrative, commercial, managerial, supervisory, or forecasting purposes.

IPC⁷ G07F 1/12, for electronic cash registers other than digital data-processing aspects thereof.

ECLA G06F 17/60, for administrative, commercial, managerial, supervisory, or forecasting purposes.

ECLA G07F 1/12, for administrative, commercial, managerial, supervisory, or forecasting purposes.

DERWENT T01-J05, for administration, commerce, or information retrieval.

DERWENT T01-J05A, for administration commerce.

2 **Health care management (e.g., record management, ICDA billing):**

This subclass is indented under subclass 1. Subject matter drawn to a computer implemented system or method particularly adapted for a health care management or delivery organization.

- (1) Note. The terms "medical" and "health care" are intended to cover all type of treatment or diagnosis of the human body, such as dentistry, podiatry, pharmaceuticals, etc.
- (2) Note. The term "particularly adapted" refers to having an element peculiar to a health care system. Incidental use of a business arrangement of general utility, in a health care environment will not be classified in this or its indented subclasses.
- (3) Note. Billing systems based on entered medical codes, for example, ICDA codes (International Classification of Diseases Abstracted), are included herein.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60A, for office automation (e.g., groupware, office work in progress, etc.).

ECLA G06F 17/60T, for spreadsheets.

ECLA G06F 17/30R, for relational databases.

ECLA G06F 17/24F, for form filling.

DERWENT T01-J06A1, for medical information systems.

DERWENT S05/G02G, for administration and medical records systems.

DERWENT S05-G02G2, for health care administration.

3 **Patient record management:**

This subclass is indented under subclass 2. Subject matter wherein the system processes the records of diagnosis or treatment of a patient.

- (1) Note. Included herein is processing the records of diagnosis or treatment as contrasted to processing information to obtain the diagnosis or treatment, which processing is classified elsewhere.

OTHER CLASSIFICATION SYSTEMS:

DERWENT S05-G02G1, for patient's medical records.

4 Insurance (e.g., computer implemented system or method for writing insurance policy, processing insurance claim, etc.):

This subclass is indented under subclass 1. Subject matter drawn to a computer implemented system or method for writing an insurance policy or processing an insurance claim.

- (1) Note. Included herein is a system for administering an insurance backed security, investment or credit card.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60D, for financial accounting; calculating earned income, interest, insurance premium, and taxes.

ECLA G06F 17/60D4, for risk analysis, e.g., for insurance, pensions.

5 Reservation, check-in, or booking display for reserved space:

This subclass is indented under subclass 1. Subject matter drawn to a computerized record keeping system for recording allocation of space in advance of use (e.g., airplane, train or concert reservation).

- (1) Note. The term "space" is intended to include seating.
- (2) Note. Such allocation includes airplane, train, or concert seating, as well as hotel room assignment.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 13, for a transportation access system not involving advance allocation of a specific space (e.g., fare collection).
- 15, for a restaurant system not involving advance allocation of a specific space.

SEE OR SEARCH CLASS:

- 340, Communications: Electrical, subclasses 825.28+ for similar subject matter with no more than nominal data processing.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60C7, [for organizing, forecasting, or planning] for reservation.

DERWENT T05-C, for ticket issuing, fare-registering, and franking apparatus

DERWENT T05-C01, for ticket and receipt issuing.

DERWENT T05-D01A, with card or badge access.

6 Coordination of plural reservations (e.g., plural trip segments, transportation and accommodation, etc.):

This subclass is indented under subclass 5. Subject matter wherein the processing system coordinates multiple distinct reservations for a single itinerary.

- (1) Note. The term "multiple distinct reservations" is not intended to include a plurality of similar reservations (e.g., reservations for a plurality of seats).

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60C8D, [for organizing, forecasting, or planning] of routes, e.g., traveling salesman.

7 Operations research:

This subclass is indented under subclass 1. Subject matter drawn to a computerized arrangement for the systematic and scientific analysis and evaluation of the operation of an organization or the programmed scheduling of an organization.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 32, for time accounting of employees or customers, i.e., the tabulation of attendance or timed presence of employees or patrons.

SEE OR SEARCH CLASS:

- 235, Registers, subclass 376 for record-sensing devices in combination with systems utilized for operations analysis.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60C, for organizing, forecasting, or planning

ECLA G06F 17/60C8, for optimization.

ECLA G06F 15/46, for optimization during production.

DERWENT T01-J05A2, for administration and management tools including management, resource allocation, business, education, government, marketing and law; also includes decision support, MIS, stock control, and workflow.

8 **Allocating resources or scheduling for an administrative function:**

This subclass is indented under subclass 7. Subject matter for the distribution of resources or for scheduling in a business or commercial environment.

SEE OR SEARCH THIS CLASS, SUBCLASS:

2, for prediction of medical facility usage.

SEE OR SEARCH CLASS:

368, Horology: Time Measuring Systems or Devices, for a timing arrangement of general utility.

700, Data Processing: Generic Control Systems or Specific Applications, subclasses 95 through 212 for this subject matter combined with a step of, or structure for product manufacture or parts assembly or allocation.

708, Electrical Computers: Arithmetic Processing and Calculating, 112 for this subject matter with calendaring.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60A4, for time management, e.g., calendars, reminders, meeting scheduling.

ECLA G06F 17/60C2, for resource allocation, e.g., PERT.

9 **Staff scheduling or task assignment:**

This subclass is indented under subclass 8. Subject matter for scheduling of or assigning a tasks to an individual or group.

(1) Note. The designation of an individual may be either by name or other designation, e.g., position.

SEE OR SEARCH CLASS:

708, Electrical Computers: Arithmetic Processing and Calculating, subclass 112 for a digital calculating computer with a calendar designation.

10 **Market analysis, demand forecasting or surveying:**

This subclass is indented under subclass 7. Subject matter including processing of market data in order to predict future demand of a product or service.

(1) Note. Use of a data processing arrangement in surveying or polling in order to obtain data is included in this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

2, for prediction of health care facility usage.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60B2, for promotions, coupons, service, and market research.

11 **Job performance analysis:**

This subclass is indented under subclass 7. Subject matter which evaluates the efficiency or productivity of an employee or other entity employed by an organization.

SEE OR SEARCH THIS CLASS, SUBCLASS:

32, for a data processing system limited to determining time or attendance.

12 **Voting or election arrangement:**

This subclass is indented under subclass 1. Subject matter determining the result of an election by multiple participants.

SEE OR SEARCH CLASS:

235, Registers, subclass 386 for a system which reads sheets bearing hand-coded indicia representative of vari-

ous categories and provides a total for each category.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60R, for betting on an outcome of an event, e.g., a race, an election, etc.; totalisators.

DERWENT T05-F, for voting and lottery apparatus, generating random numbers.

13 **Transportation facility access (e.g., fare, toll, parking):**

This subclass is indented under subclass 1. Subject matter controlling access to a vehicle or vehicle related facility in response to payment or other precondition for such access.

(1) Note. The term “vehicle related facility” designates a location for which payment for vehicle admission is required.

(1) Note. The reference to “other precondition” is intended to include passenger or baggage inspection.

SEE OR SEARCH THIS CLASS, SUBCLASS:

5, for a system processing data for a vehicle seat reservation.

SEE OR SEARCH CLASS:

235, Registers, subclasses 33+ for a mechanical fare register.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60C, [for organizing, forecasting, or planning] machines.

DERWENT T05-D02, [for individual entry or exit registers] for vehicles.

DERWENT T05-C01, for ticket or receipt issuing.

DERWENT T05-C03, for fare registering.

DERWENT T07-F, for parking control systems.

14 **Distribution or redemption of coupon, or incentive or promotion program:**

This subclass is indented under subclass 1. Subject matter particularly designed for price reduction of, or premium credit resulting from, the purchase of a commodity or service.

(1) Note. A coupon dispensing or redeeming electronic cash register is classified in this subclass.

(2) Note. A display or advertising system is included herein.

SEE OR SEARCH CLASS:

463, Amusement Devices: Games, subclasses 1+, when there is a recitation (according to the (3) Note of the Class 705 Class Definition) of a method or apparatus for moving or processing information specified as game or contest information, especially subclasses 16+, where game or contest information relates to a chance-type game (i.e., one that involves an award or prize based upon the occurrence of a chance happening or event; e.g., lottery, keno, slot machine, etc.). However, in order for the specified information to be considered significant for placement in Class 463, there must be significant game processing. For example, the mere printing of a selected lottery number is not significant unless there is also included an element of a game for Class 463 (e.g., a determination of whether the number is a winning number, such as by lot matching, a determination of an award or prize value associated with a number, etc.). A “coupon” or price adjustment given to a patron based upon an item purchased or another predetermined or nonrandom criteria is not considered to be a chance event or happening appropriate for Class 463.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60B2, for promotions, coupons, services, and market research.

15 Restaurant or bar:

This subclass is indented under subclass 1. Subject matter particularly designed for use in an establishment serving food or drink to buyers.

- (1) Note. Classification in this subclass requires some relationship to either the preparation or serving of food or drink. Incidental placement of a system in such an environment (e.g., an electronic cash register in a restaurant) does not of itself cause classification in this subclass.

SEE OR SEARCH CLASS:

- 186, Merchandising, subclasses 38+ for a dining room arrangement absent any significant data processing.

16 Including point of sale terminal or electronic cash register:

This subclass is indented under subclass 1. Subject matter drawn to a computerized arrangement for including a mechanism for effecting a transaction and determining the amount of a sale which may also be a terminal in a system.

- (1) Note. The mechanism for effecting a transaction may include a mechanism for handling cash, or debiting an account or prepaid card.
- (2) Note. The sale may include a plurality of goods at different prices.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 14, for an automated cash register system having an incentive or promotional feature (e.g., coupon dispensing).
- 64, through 79 for cryptographic secure transaction.

SEE OR SEARCH CLASS:

- 186, Merchandising, for a general check-out arrangement.
- 235, Registers, subclasses 7+ for a mechanical cash register; subclasses 2+ for a mechanical cash register with a recorder.

- 377, Electrical Pulse Counters, Pulse Dividers, or Shift Registers: Circuits and Systems, subclass 14 for an electrical register for registering counts for different monetary amounts.

- 902, Electronic Funds Transfer, subcollection 22 for a cross-reference art collection of disclosures of a point of sale terminal absent significant claimed data processing.

- 463, Amusement Devices: Games, subclasses 1+, when there is a recitation (according to the (3) Note of the Class 705 Class Definition) of a method or apparatus for moving or processing information specified as game or contest information, especially subclasses 16+, where game or contest information relates to a chance-type game (i.e., one that involves an award or prize based upon the occurrence of a chance happening or event; e.g., lottery, keno, slot machine, etc.). However, in order for the specified information to be considered significant for placement in Class 463, there must be significant game processing. For example, the mere printing of a selected lottery number is not significant unless there is also included an element of a game for Class 463 (e.g., a determination of whether the number is a winning number, such as by lot matching, a determination of an award or prize value associated with a number, etc.). A "coupon" or price adjustment given to a patron based upon an item purchased or another predetermined or nonrandom criteria is not considered to be a chance event or happening appropriate for Class 463.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60B, for data processing in a buying-selling transaction.
 ECLA G06F 17/60B4, for exchange business, e.g., quotations or sales transactions of stock or other commodities
 ECLA H04L 12/18B, for stock quotation systems.
 DERWENT T05-L, for point-of-sale equipment, EFT, and other currency handling systems.
 DERWENT T05-L01, for point-of-sale equipment.
 DERWENT T05-L01A, for cash register.
 DERWENT T05-L01X, for other point-of-sale equipment or systems.

17 Having interface for record bearing medium or carrier for electronic funds transfer or payment credit:

This subclass is indented under subclass 16. Subject matter further including an arrangement for reading a customer associated payment effecting data bearing record or carrier.

- (1) Note. Such a data bearing record is intended to include a credit card, debit card, or a value bearing ticket.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

65, through 69 for cryptographic secure transaction including intelligent token.

SEE OR SEARCH CLASS:

235, Registers, subclasses 375+ for a cash register with a detail of record sensing control absent significant data processing.

OTHER CLASSIFICATION SYSTEMS:

DERWENT T05-L01B, for card reader.
 DERWENT T05-L01C, for product code reader.
 DERWENT T05-L02, for electronic funds transfer.
 DERWENT T04-K02, [for smart cards] reading or writing aspects.

18 Having security or user identification provision (password entry, etc.):

This subclass is indented under subclass 16. Subject matter having an arrangement to either prevent unauthorized use of, or access to, the cash register; or to identify the user of the cash register.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

44, for a funds transfer system requiring authorization or authentication.

SEE OR SEARCH CLASS:

463, Amusement Devices: Games, subclasses 1+, when there is a recitation (according to the (3) Note of Section III of the Class 705 Definition) of a method or apparatus for moving or processing information specified as game or contest information, especially subclass 29 for access or authorization to enter or select a game.
 713, Electrical Computers and Digital Processing Systems: Support, appropriate subclasses and particularly subclasses 182 through 186 for system access control based on cryptographic user identification.

OTHER CLASSIFICATION SYSTEMS:

DERWENT T05-L03C, for security and control.
 DERWENT T05-L03C5, for security system aspects.

19 Tax processing:

This subclass is indented under subclass 16. Subject matter in which the sales terminal system computes tax on the transaction.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

31, for a tax calculation or submission system other than a part of a cash register or a sales terminal.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60D, for financial accounting; calculating earned income, interest, insurance, premium, taxes.

- 20 Price look-up processing (e.g., updating):**
This subclass is indented under subclass 16. Subject matter including a feature of a memory or file arrangement for looking up the price of an item being purchased where an item designator is entered into the terminal.

- 21 Interconnection or interaction of plural electronic cash registers (ECRs) or to host computer (e.g., network detail, transfer of information from host to ECR or from ECR to ECR, etc.):**

This subclass is indented under subclass 16. Subject matter wherein two or more spaced apart electronic cash registers (ECRs) are connected for cooperation therebetween; or a connection to an ECR is connected for cooperation with a host computer spaced apart therefrom.

- (1) Note. The ECR's are most often connected in a network configuration.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 39, for similar a similar network for electronic funds transfer not claiming an electronic cash register or point of sale terminal.

SEE OR SEARCH CLASS:

- 395, Information Processing System Organization, 200.01+ for a plural computer network of general utility.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60B6, for centrally controlled vending systems.

ECLA G06F 17/60C, [for organizing, forecasting] plurality of machines.

DERWENT T05-L01D, for data transfer and network aspects.

- 22 Inventory monitoring:**
This subclass is indented under subclass 16. Subject matter wherein the cash register includes an arrangement for establishing,

maintaining, or updating a record of a store of goods.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 28, for an automated inventory management organization not combined with a cash register or sales terminal.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60C4, for inventory purposes; for order filing.

ECLA G06F 17/60C5, for record storage, loading, unloading or distribution of goods or materials.

DERWENT T05-L01C, for product code reader for both check out and inventory purposes.

- 23 Input by product or record sensing (weighing, scanner processing):**

This subclass is indented under subclass 16. Subject matter the sales information is input by sensing a property of the product being purchased or a record attached thereto.

SEE OR SEARCH CLASS:

- 177, Weighing Scales, subclass 25.15 for a computerized weighing scale which also computes price.
235, Registers, subclasses 375+ for a feature of data bearing record control for an electronic cash register.

OTHER CLASSIFICATION SYSTEMS:

DERWENT T05-L01X, for other point-of-sale equipment or systems.

DERWENT T05-L01C, for product code reader.

- 24 Specified transaction journal output feature (e.g., printed receipt, voice output, etc.):**

This subclass is indented under subclass 16. Subject matter producing a printed or audible indication of each component of a transaction.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 75, for cryptographic secure transaction having transaction verification.

OTHER CLASSIFICATION SYSTEMS:

DERWENT T05-L01X, for other point-of-sale equipment or systems.

25 Specified keyboard feature:

This subclass is indented under subclass 16. Subject matter including a feature of a keyboard including a plurality of manually operated switches.

SEE OR SEARCH CLASS:

341, Coded Data Generation or Conversion, subclasses 22+ for a keyboard controlled code transmitting device.
708, Electrical Computers: Arithmetic Processing and Calculating, subclass 142 for a keyboard input for a digital calculator.

OTHER CLASSIFICATION SYSTEMS:

DERWENT T05-L01X, for other point-of-sale equipment or systems.

DERWENT T05-L03C1, for general control system.

26 Electronic shopping (e.g., remote ordering):

This subclass is indented under subclass 1. Subject matter drawn to a computerized arrangement which enables a purchaser to inspect or select from a plurality of different items, or effect a purchase of one or more items at a location geographically separated from the system user.

(1) Note. A remote shopping system is included in this subclass.

(2) Note. Browsing of a selection without a purchase transaction is classified in this or its indented subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

77, for cryptographic remote charge determination or payment system.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60B, for data processing for buying-selling transaction.

27 Presentation of image or description of sales item (e.g., electronic catalog browsing):

This subclass is indented under subclass 26. Subject matter which includes a feature enabling a user to inspect a listing, or other visual or audible representation of plural items available for purchase.

28 Inventory management:

This subclass is indented under subclass 1. Subject matter drawn to a computerized arrangement for establishing, maintaining, or updating a record of a store of goods.

SEE OR SEARCH THIS CLASS, SUBCLASS:

22, for an automated inventory management organization combined with a cash register or sales terminal.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60C4, for inventory purposes; for order filing.

ECLA G06F 17/60C5, for record storage, loading, unloading or distribution of goods or materials.

29 Itemization of parts, supplies, or services (e.g., bill of materials):

This subclass is indented under subclass 28. Subject matter drawn to a computerized arrangement for generating an itemized listing of the components needed either totally or based on specific tasks in an organization.

SEE OR SEARCH CLASS:

700, Data Processing: Generic Control Systems or Specific Applications, subclass 107 for a bill of materials system combined with a step of or structure for, product manufacture.

30 Accounting:

This subclass is indented under subclass 1. Subject matter drawn to a computerized arrangement for recording, analyzing, verify-

ing, or reporting of funds or other quantitatively innumerable factors used in a business.

SEE OR SEARCH CLASS:

377, Electrical Pulse Counters, Pulse Dividers, or Shift Registers: Circuits and Systems, subclass 14 for electrical registers for registering counts for different monetary amounts.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60D, for financial accounting; calculating earned income, interest, insurance premium, taxes.

31 Tax preparation or submission:

This subclass is indented under subclass 30. Subject matter drawn to a computerized arrangement for determining or submitting a tax or tax form to a governmental entity.

32 Time accounting (time and attendance, monitoring billable hours):

This subclass is indented under subclass 30. Subject matter for analysis or allocation of hours either (1) worked by an individual, or (2) utilized by and billable to an individual or other entity.

SEE OR SEARCH THIS CLASS, SUBCLASS:

11, for job performance analysis, computing quantities additional to attendance (e.g., productivity).

SEE OR SEARCH CLASS:

368, Horology, Time Measuring Systems or Devices, appropriate subclasses for time responsive control of general utility.

700, Data Processing: Generic Control Systems or Specific Applications, subclasses 14 through 16 for time responsive sequential or selective processor controller arrangement.

OTHER CLASSIFICATION SYSTEMS:

DERWENT S04-C03C, for timers, application.

DERWENT S04-E, for time recording.

DERWENT T05-G03, for registering/indicating-time of events.

33 Checkbook balancing, updating or printing arrangement:

This subclass is indented under subclass 30. Subject matter including an arrangement for attaching a data processing device to a checkbook, which processes transaction data to verify, or carry forward, the checkbook balance, or to print a check, upon to entry of an account transaction.

SEE OR SEARCH CLASS:

708, Electrical Computers: Arithmetic Processing and Calculating, subclass 106 for a checkbook attached digital calculator, in which the transaction information is limited to the date or transaction amount.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60D2, for account balancing.

34 Bill preparation:

This subclass is indented under subclass 30. Subject matter including an arrangement for generating a notice of payment due.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60B8, for financial accounting; calculating earned income, interest, insurance premium, taxes, billing or invoicing.

35 Finance (e.g., banking, investment or credit):

This subclass is indented under subclass 1. Subject matter drawn to a computerized arrangement for planning the disposition or use of funds or securities, or extension of credit.

SEE OR SEARCH CLASS:

186, Merchandising, for a banking structural arrangement.

235, Registers, subclass 379 for record-sensing devices in combination with a system that maintain financial accounts; i.e., a banking system; and subclass 380 for a system that includes the ascertaining of credit.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60B, for data processing in buying-selling transactions.

ECLA G06F 17/60D, for financial accounting.

DERWENT T05- J05I, includes banking, billing, point of sale (POS), electronic fund transfer (EFT), and metering.

36 Portfolio selection, planning or analysis:

This subclass is indented under subclass 35. Subject matter drawn to a computerized arrangement for planning the selection or evaluation of securities or other investments for a single entity.

- (1) Note. The term "entity" refers to an individual or other legally recognized body.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60B4, for exchange business, e.g., quotations or sales transactions of stock or other commodities, etc.

ECLA H04L 12/18B, for stock quotation systems.

37 Trading, matching, or bidding:

This subclass is indented under subclass 35. Subject matter including the trading or exchange of securities or commodities within an organized system.

- (1) Note. This subclass includes distribution of services or products (e.g., utilities, heating, etc.) in a building by an "auction" or bidding system.

38 Credit (risk) processing or loan processing (e.g., mortgage):

This subclass is indented under subclass 35. Subject matter drawn to a computerized arrangement for evaluation of the risk factors in a loan determination.

SEE OR SEARCH CLASS:

235, Registers, subclass 380 for a record-sensing device in combination with a system that includes the ascertaining of credit.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60D4, for risk analysis, e.g., for insurance pensions, etc.

39 Including funds transfer or credit transaction:

This subclass is indented under subclass 35. Subject matter drawn to a computerized arrangement for transferring funds by debiting one account and crediting another by the same amount.

- (1) Note. The accounts may be of the same or different individuals or entities.

SEE OR SEARCH THIS CLASS, SUBCLASS:

64, through 79 for cryptographic secure transaction.

SEE OR SEARCH CLASS:

902, Electronic Funds Transfer, appropriate subcollections for a cross-reference art collection of disclosures of electronic funds transfer without significant claimed data processing.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60D2, for account balancing.

DERWENT T05-L02, for electronic funds transfer.

40 Bill distribution or payment:

This subclass is indented under subclass 39. Subject matter drawn to a computerized arrangement for generating notices of payment due, or transferring funds in response thereto.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

2+, this subject matter particularly adapted for health insurance claims or payments.

77, for cryptographic remote charge determination or payment system.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60B8, for billing or invoicing.

41 **Having programming of a portable memory device (e.g., IC card, "electronic purse"):**

This subclass is indented under subclass 39. Subject matter having a user operated arrangement for programming an object having a value carrying memory (e.g., an ATM card) prior to use, with details of the desired transaction.

(1) Note. Such cards usually include an integrated circuit (IC) element, and are often referred to as "smart cards".

(2) Note. Included herein is a transaction specific card preprogramming arrangement.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

65, through 79 for cryptographic secure transaction including intelligent token.

SEE OR SEARCH CLASS:

257, Active Solid-State Devices (e.g., Transistors, Solid-State Diodes), subclass 674 for semiconductor smart card structure.

902, Electronic Funds Transfer, subcollection 26 for a cross-reference art collection of disclosures of an ATM or similar card carrying semiconductor or processing circuitry.

OTHER CLASSIFICATION SYSTEMS:

DERWENT T04-K, for smart cards, i.e., cards incorporating integrated circuit memory, etc.

DERWENT T01-H01B3A, for memory card.

DERWENT T05-H02C5, [for card-freed apparatus] magnetic card

DERWENT T05-H02C5B, for optical card.

DERWENT T05-H02C5C, for smart card, IC card.

42 **Remote banking (e.g., home banking):**

This subclass is indented under subclass 39. Subject matter for an arrangement for effecting the custody, loan, exchange, or issue of money for the extension of credit or for facilitating the transmission of funds from a computer at a location geographically spaced apart from a banking establishment.

(1) Note. Such a computer may be located in a user's residence or place of business.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

18, for a point of sale terminal requiring authorization or authentication.

70, for cryptographic home banking secure transaction.

SEE OR SEARCH CLASS:

235, Registers, subclass 379 for a record-sensing device in combination with a system that maintains financial accounts, i.e., banking system.

902, Electronic Funds Transfer, subcollection 26 for a cross-reference art collection of disclosures of home banking using a general purpose terminal.

OTHER CLASSIFICATION SYSTEMS:

ECLA G06F 17/60C, for centrally controlled vending system.

43 **Including Automatic Teller Machine (i.e., ATM):**

This subclass is indented under subclass 39. Subject matter drawn to a computerized arrangement to either (a) accept for deposit by

a user*, or (b) convey for withdrawal to a user*, a financial document or currency; in connection with a computerized concurrent transaction.

SEE OR SEARCH CLASS:

902, Electronic Funds Transfer, subcollections 8+ for a cross-reference art collection of disclosures of an ATM terminal.

OTHER CLASSIFICATION SYSTEMS:

DERWENT T05-L03, for cash dispensing and depositing machines.

DERWENT T05-H02, [for card, token, or card -freed apparatus] equipment actuated by objects other than coins.

DERWENT T05-D01, [for individual entry or exit registers] for personnel control ('85ATM).

44 Requiring authorization or authentication:

This subclass is indented under subclass 39. Subject matter in which an approval is required prior to effecting a funds transfer between accounts.

- (1) Note. Such approval may be related to either the permitted amount of the transaction or the identity or authorization of the user.

SEE OR SEARCH THIS CLASS, SUBCLASS:

67, for cryptographic secure transaction including intelligent token for authentication.

SEE OR SEARCH CLASS:

713, Electrical Computers and Digital Processing Systems: Support, appropriate subclasses and particularly subclasses 182 through 186 for system access control based on cryptographic user identification.

OTHER CLASSIFICATION SYSTEMS:

DERWENT T05-01B, for with human characteristic detection.

DERWENT T05-L03C, for security and control.

DERWENT T05-L03C8, for security system aspects.

45 With paper check handling:

This subclass is indented under subclass 39. Subject matter which processes a paper document authorizing the transaction check as part of the funds transfer operation.

- (1) Note. The document may be a check, deposit slip or withdrawal slip.

SEE OR SEARCH THIS CLASS, SUBCLASS:

24, for an electronic cash register which may process (e.g., endorse a check by printing.

SEE OR SEARCH CLASS:

235, Registers, subclasses 375+ for a check reading system absent significant data processing.

382, Image Analysis, subclass 137 for a pattern reading image analysis system for reading a bank check.

50 BUSINESS PROCESSING USING CRYPTOGRAPHY:

Subject matter including cryptographic apparatus or methods uniquely designed for or utilized in the practice, administration, or management of an enterprise, the processing of financial data, or where a charge for goods or services is determined.

- (1) Note. Excluded herein is subject matter related to business processing having only nominal recitation of cryptographic processing such as encrypting, scrambling, etc. Such nominal recitation of cryptography combined with business processing is classified elsewhere.

SEE OR SEARCH THIS CLASS, SUBCLASS:

1, 400 - 418, and 500 for business data processing in general or in combination with nominal cryptography.

OTHER CLASSIFICATION SYSTEMS:

IPC G06F 17/60, for administrative, commercial, managerial, supervisory, or forecasting purposes.

IPC G07G 1/12, for electronic cash registers other than digital data processing aspects thereof.

IPC H04K 1/00, for secret communication.

IPC G09C, for ciphering or deciphering apparatus for cryptographic or other purposes involving the need for secrecy.

IPC H04B, for transmission.

IPC H04B 1/66, for reducing bandwidth of signals.

IPC H04B 1/69, for spread spectrum techniques in general.

IPC H04B 14/08, by using a sub-carrier.

IPC H04J, for multiplex communication.

IPC H04N 7/16, for secret or subscription television systems.

IPC H04L 9/00, for arrangements for secret or secure communication.

DERWENT T01-J05, for administration, commerce, or information retrieval.

DERWENT T01-J05A2, for administration and management tools -- includes management, resource allocation, business, education, government, marketing, and law. Also includes, decision support, MIS, stock control, workflow control, and project management

DERWENT T01-J05A, for administration, commerce.

DERWENT W01-A05, for secret communication.

51 Usage protection of distributed data files:

This subclass is indented under 50. Subject matter wherein the usage of distributed information representing a selection by an individual is controlled by encryption.

- (1) Note. Examples of such distribution can be by way of a storage medium such as a CD or by downloading.

52 Usage or charge determination:

This subclass is indented under 51. Subject matter including determining the amount of use of the selected information or a cost associated therewith.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

77, through 79, for a general electronic commerce system which includes billing.

SEE OR SEARCH CLASS:

380, Cryptography, subclasses 227 through 230 for video electric signal modification using cryptography via record or coin control, and subclasses 231 - 234 for video electric signal modification using cryptography having usage or charge determination.

53 Including third party for collecting distributing payment (clearinghouse):

This subclass is indented under 52. Subject matter wherein a third party not associated with the actual distribution of the selected data is utilized to gather or disperse payment therefor.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

78, for a secure transaction including a third party.

54 Adding plural layers of rights or limitations by other than the original producer:

This subclass is indented under 52. Subject matter wherein a party other than the originating source places further restriction or proprietary interest on the use of the selected data.

55 Requiring a supplemental attachment or input (e.g., dongle) to open:

This subclass is indented under 51. Subject matter wherein an auxiliary device or signal interacts with the distributed data file to permit usage.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

59, for licensing in general.

56 Specific computer ID (e.g., serial number, configuration, etc.):

This subclass is indented under 55. Subject matter wherein the interaction uses a signal that describes or is characteristic of a particular data processing system.

- 57 Copy protection or prevention:**
This subclass is indented under 51. Subject matter which prevents rerecording of a distributed data file.
- SEE OR SEARCH CLASS:
380, Cryptography, subclasses 201 through 204 for copy protection or prevention of a video signal.
- 58 Having origin or program ID:**
This subclass is indented under 57. Subject matter wherein a copy protected distributed data file is supplemented by a unique identifier of a source of the file or of the file itself.
- 59 Licensing:**
This subclass is indented under 51. Subject matter wherein a determination is made that an outside entity has authorized the use of the selection.
- SEE OR SEARCH CLASS:
713, Electrical Computers and Digital Processing Systems: Support, subclasses 200 through 202 for computer security in general.
- 60 Postage metering system:**
This subclass is indented under 50. Subject matter wherein a charge for mailing an article is determined, markings representing this charge are affixed to the article, and respective modifications to an account balance are made.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
401+, for a postage meter system absent cryptography.
- SEE OR SEARCH CLASS:
380, Cryptography, subclass 51 for electric signal modification with printed copy production and subclass 55 for cryptographic printed copy production in general.
- 61 Reloading/recharging:**
This subclass is indented under 60. Subject matter wherein additional funds are provided to the account balance.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
403, for postage meter recharging absent cryptography.
- 62 Having printing detail (e.g., verification of mark):**
This subclass is indented under 60. Subject matter wherein particulars of the marking of the article to be mailed are provided.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
408, for postage meter printing absent cryptography.
- SEE OR SEARCH CLASS:
395, Information Processing System Organization, subclasses 101+ for static presentation processing (e.g., printing).
- 63 Utility metering system:**
This subclass is indented under 50. Subject matter wherein the distribution of energy (e.g., gas, electricity) or water is monitored.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
412, for utility usage cost determination absent cryptography.
- SEE OR SEARCH CLASS:
702, Data Processing: Measuring, Calibrating, or Testing, subclass 61 and 62 for power logging (e.g., metering).
- 64 Secure transaction (e.g., EFT/POS)**
This subclass is indented under 50. Subject matter wherein an exchange of financial data is protected by encryption.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
16, and 17 - 25 for a point of sale terminal processing absent cryptography.
39, for funds transfer processing absent cryptography.
- SEE OR SEARCH CLASS:
221, Article Dispensing, appropriate subclasses for currency dispensing structure absent signal encryption.

- 235, Registers, subclass 379 for a coded record actuated banking system and subclasses 380 - 382.5 for a coded record operated credit system absent signal encryption.
- 340, Communications: Electrical, subclass 825.33 for an intelligence comparing credit system absent signal encryption.
- 379, Telephonic Communication, subclasses 91.01 through 91.02 for automatic credit authorization over a telephone line absent signal encryption.
- 902, Electronic Funds Transfer, appropriate subclasses, particularly subclass 2 for a cross reference art collection of transmitted data protection which may be via encryption.
- 65 Including intelligent token (e.g., electronic purse):**
This subclass is indented under 64. Subject matter under subclass 64 which includes a portable carrier with data processing capability.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
- 17, for point of sale device having interface for record bearing medium.
- 41, for electronic purse programming absent cryptography.
- SEE OR SEARCH CLASS:
- 235, Registers, subclass 379 for a banking system controlled by data bearing record.
- 713, Electrical Computers and Digital Processing Systems: Support, subclass 159 for cryptographic multiple computer communication central trusted authority authentication having intelligent token and subclasses 185 and 186 for digital processing access control using record or token.
- 902, Electronic Funds Transfer, subclasses 25 through 29 for cross reference art collections utilizing a specific identifier (e.g., bank card) in electronic funds transfer.
- 66 Intelligent token initializing or reloading:**
This subclass is indented under 65. Subject matter wherein the intelligent token is programmed prior to use or its value bearing data is increased.
- 67 Including authentication:**
This subclass is indented under 65. Subject matter wherein the intelligent token participates in a validation procedure.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
- 44, for funds transfer requiring authentication absent cryptography.
- SEE OR SEARCH CLASS:
- 380, Cryptography, subclass 229 for video signal modification which is record or coin controlled and includes authentication, subclass 232 for video signal modification which has usage or charge determination including authentication, subclasses 247 - 250 for cellular phone cryptographic authentication, and subclass 258 for a communication system which is position dependent or has authentication.
- 713, Electrical Computers and Digital Processing Systems: Support, subclasses 155 through 159 for multiple computer communication using cryptography having central trusted authority providing computer authentication, subclass 161 for multiple computer communication using cryptography where packet header denotes cryptographically protected data and having data authentication, and subclasses 168 - 181 for multiple computer communication using cryptography having particular communication authentication technique, particularly subclasses 172 - 174 for multiple computer communication authentication using an intelligent token.
- 68 Balancing account:**
This subclass is indented under 65. Subject matter including reconciliation of cumulative transaction data on the portable data carrier with corresponding data from a host.

69 Electronic cash detail (e.g., blinded, divisible, or detecting double spending):

This subclass is indented under 65. Subject matter including specifics of value bearing data stored on the intelligent token.

SEE OR SEARCH CLASS:

713, Electrical Computers and Digital Processing Systems: Support, subclass 180 for generating specific digital signature type.

70 Home banking:

This subclass is indented under 64. Subject matter wherein the user terminal is located in the user's place of residence.

SEE OR SEARCH THIS CLASS, SUBCLASS:

42+, for home banking absent cryptography.

SEE OR SEARCH CLASS:

902, Electronic Funds Transfer, subclass 24 for a cross reference art collection of electronic funds transfer which includes home banking.

71 Including key management:

This subclass is indented under 64. Subject matter including supervision or control of a signal necessary for encryption or decryption.

SEE OR SEARCH CLASS:

380, Cryptography, subclasses 277+ for generic key management.

72 Verifying PIN:

This subclass is indented under 64. Subject matter wherein the personal identification number is confirmed.

SEE OR SEARCH THIS CLASS, SUBCLASS:

18, for point of sale terminal having security identification provision absent encryption and subclass 44 for funds transfer authorization absent encryption.

SEE OR SEARCH CLASS:

713, Electrical Computers and Digital Processing Systems: Support, subclass 183 for system access having password entry and subclass 184 for a PIN generator device.

OTHER CLASSIFICATION SYSTEMS:

IPC G06F 17/60, for administrative, commercial, managerial, supervisory, or forecasting purposes.

IPC G07G 1/12, for electronic cash registers other than digital data-processing aspects thereof.

IPC H04K 1/100, for secret communication.

IPC G09C, for ciphering and deciphering apparatus.

IPC H04B 1/66, for systems with reduced bandwidth or suppressed carrier.

IPC H04B 1/69, for spread spectrum techniques in general.

IPC H04B 14/08, by using a sub. carrier.

IPC H04J, by multiplexing.

IPC H04L 9/00, for transmission systems for secret digital information.

IPC H04L 9/32, for arrangement for secret or secure communication including means for verifying the identity or authority of a user of the system.

IPC G06F, for computer system.

IPC G07F 7/08, for coin freed or like apparatus with coded identity card or credit card.

73 Terminal detail (e.g., initializing)

This subclass is indented under 64. Subject matter including specifics of a user station.

74 Anonymous user system:

This subclass is indented under 64. Subject matter wherein the identity of a user is not traceable to a particular transaction.

75 Transaction verification:

This subclass is indented under 64. Subject matter wherein the details of a transaction are cryptographically processed to allow subsequent confirmation thereof.

- SEE OR SEARCH THIS CLASS, SUB-CLASS:
24, for point of sale terminal with transaction journal output absent encryption.
- SEE OR SEARCH CLASS:
713, Electrical Computers and Digital Processing Systems: Support, subclasses 176 through 179 for authentication by digital signature.
- 76 Electronic credential:**
This subclass is indented under 64. Subject matter wherein digital data authorizing a particular user to participate in a transaction is provided.
- 77 Including remote charge determination or related payment system:**
This subclass is indented under 64. Subject matter wherein the determination at a remote vendor site of a payment due or a transfer of funds from a buyer to a remote vendor.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
26, and 27, for electronic shopping absent encryption.
40, for bill distribution or payment absent cryptography.
52, through 54, for usage or charge determination of a protected distributed data file.
- 78 Including third party:**
This subclass is indented under 77. Subject matter wherein an additional party remote from the vendor sends a notice of payment due to a remote buyer or receives funds transferred from a remote buyer.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
53, for usage or charge determination of a protected distributed data file having a third party.
- 79 Including a payment switch or gateway:**
This subclass is indented under 77. Subject matter wherein the transfer of funds or payment due includes a communication node connecting two different financial networks.
- SEE OR SEARCH CLASS:
713, Electrical Computers and Digital Processing Systems: Support, subclass 153 and 154 for a particular node in cryptographically protected multiple computer communication.
- 80 Electronic negotiation:**
This subclass is indented under 50. Subject matter including an offer and acceptance or counteroffer among parties.
- 400 FOR COST/PRICE:**
This subclass is indented under the class definition. Subject matter wherein the data processing or calculating computer is designed for or utilized in determining charges for goods or services.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
1+, for a specific application of business practice and management, particularly subclasses 5+ for a reservation system including means for calculating a fare, subclasses 16+ for a cash register for calculating cost/price of commodity, and subclasses 50 - 80 for business processing using cryptography.
- SEE OR SEARCH CLASS:
235, Registers, subclasses 7+ for a cash register, and subclass 61 for mechanically computing a cost/price ratio.
- 401 Postage meter system:**
This subclass is indented under subclass 400. Subject matter wherein the data processing or calculating computer comprises means for determining and printing cost required for mailing an article.
- SEE OR SEARCH CLASS:
177, Weighing Scales, subclasses 25.11+ for generic weight determining devices utilizing mathematical computing.

402 Special service or fee (e.g., discount, surcharge, adjustment, etc.)

This subclass is indented under subclass 401. Subject matter wherein a basic postage fee is modified to accommodate a particular postage service or condition.

- (1) Note. The particular postage service includes, for example, express mail, certified mail, C.O.D., special delivery, insurance, return receipt, etc.
- (2) Note. The condition includes, for example, discount, surcharge, adjustment, the least costly fee, etc.
- (3) Note. A mere recitation of functional inputting means representing special service or charge without a step or procedure to carry out the modification of the fee is excluded from this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 409, for postage meter system comprising means for revising a postage rate structure.

403 Recharging:

This subclass is indented under subclass 401. Subject matter wherein said data processing or calculating computer comprises means for resetting a stored value of credit representing a postage fund available within a postage meter system.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 61, for reloading recharging in a cryptographic postage metering system.

404 Record keeping:

This subclass is indented under subclass 401. Subject matter comprising means for storing a list of cumulative historical information related to a postage activity.

405 Data protection:

This subclass is indented under subclass 401. Subject matter comprising means for preventing postage information from being inadvertently modified or destroyed.

SEE OR SEARCH CLASS:

- 395, Information Processing System Organization, subclasses 186+ for information processing system having a security feature for protection of system hardware, software, or data.

406 With specific mail handling means:

This subclass is indented under subclass 401. Subject matter including details of means for performing a mailing process associated with the article.

- (1) Note. Means for performing a mailing process includes, for example, feeder, conveyor, inserter, sorter, sealer, stacker, etc.

SEE OR SEARCH CLASS:

- 53, Package Making, subclasses 154+ for forming and packing contents unit from plural or different supply sources.
- 198, Conveyors: Power-Driven, appropriate subclasses for a particular type of conveying system.
- 209, Classifying, Separating, and Assorting Solids, subclass 900 for a cross reference art collection involving sorting flat-type mail.

407 Including mailed item weight:

This subclass is indented under subclass 401. Subject matter wherein postage of the article is determined from the weight of the article.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 23, for a point of sale terminal or an electronic cash register having a weighing device.
- 414+, for computing means including a weighing device for computing weight and cost of goods.

408 Specific printing:

This subclass is indented under subclass 401. Subject matter including details of a printing mechanism or of information to be printed.

- (1) Note. The details of information to be printed includes, for example, messages,

s:graphical data, coded data, encrypted information, etc.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 62, for printing detail in a cryptographic postage metering system.
- 410, for a software printing control module.

SEE OR SEARCH CLASS:

- 101, Printing, appropriate subclasses for printing by impression of types or die or by applying coating matter through perforations, as in stenciling.
- 347, Incremental Printing of Symbolic Information, appropriate subclasses for printing information dot by dot using an ink-jet, an electric, a thermal or a light or beam recording apparatus.
- 358, Facsimile and Static Presentation Processing, subclasses 1.1 through 1.18 for data processing for presentation on a fixed medium, such as paper.

409 **Rate updating:**

This subclass is indented under subclass 401. Subject matter comprising means for revising a postage rate structure.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 402, for postage meter system comprising means for modifying a basic postage fee to accommodate a particular postage service or condition (e.g., discount, surcharge, adjustment, etc.)

410 **Specialized function performed:**

This subclass is indented under subclass 401. Subject matter wherein the data processing or calculating computer is programmed to carry out a sequence of instructions related to a predetermined task associated with the postage meter system.

- (1) Note. Tasks includes input and output distribution, interrupt processing, job scheduling, message transmitting, etc.

411 **Display controlling:**

This subclass is indented under subclass 410. Subject matter wherein the sequence of instructions is for visually presenting postage related information to an operator.

- (1) Note. Operation for controlling devices solely for producing a "hard copy" (e.g., printer, plotter, etc.) is excluded from this subclass.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 408, for postage meter system including details of printing mechanism or of information to be printed.

412 **Utility usage:**

This subclass is indented under subclass 400. Subject matter in which the charges reflect a consumed quantity of power or energy (e.g., electricity, gas, therm, etc.) or water.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 63, for cryptographic utility metering system.
- 413, for a determined cost/price of a fluid.

413 **Fluid:**

This subclass is indented under subclass 400. Subject matter in which the charges is determined for a dispensed volume or a delivered quantity of a flowing substance (e.g., liquid or gas).

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 412, for a determined cost/price of a consumed quantity of power or energy.

414 **Weight:**

This subclass is indented under subclass 400. Subject matter wherein the goods are weighted to determine the charges.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 23, for a point of sale terminal or an electronic cash register having a weighing device.
- 407, for a postage meter system including weighing means.

SEE OR SEARCH CLASS:

- 177, Weighing Scales, subclass 3 and 25.11+ for computing weight with specific structure to the weighing means.
- 702, Data Processing: Measuring, Calibrating, or Testing, subclasses 101+ for calibrating of weight measurements and subclasses 173+ for a weight measurement system.

415 Correcting or compensating:

This subclass is indented under subclass 414. Subject matter comprising means for obtaining an accurate weight measurement of the goods by means of a zero correction factor, tare weight, or weighing scale motion detection.

416 Specific input and output device :

This subclass is indented under subclass 414. Subject matter comprising details of means for entering or visually presenting information relating to the goods.

- (1) Note. The details include, for example, control panel, input unit with functional keys, reader means, interactive display means, dot matrix printer, cathode ray tubes, etc.

417 Distance (e.g., taximeter):

This subclass is indented under subclass 400. Subject matter wherein the charge is determined using the units of miles or kilometers travelled.

SEE OR SEARCH CLASS:

- 235, Registers, subclasses 33+ for fare registers; and subclass 384 for record-sensing devices in combination with means that determine the price based on distance travelled.
- 702, Data Processing: Measuring, Calibrating, or Testing, subclasses 150+ for orientation or position measurement systems, particularly subclasses 158+ for the measuring of linear distance or length.

418 Time (e.g., parking meter):

This subclass is indented under subclass 400. Subject matter wherein the charges reflect a purchased activity period.

- (1) Note. The charge may include special fee or surcharge due to special time of day or year, location, etc.)

SEE OR SEARCH CLASS:

- 368, Horology: Time Measuring Systems or Devices, subclasses 89+ for time interval measuring means.
- 702, Data Processing: Measuring, Calibrating, or Testing, subclasses 176+ for time duration or rate measuring.

500 MISCELLANEOUS:

This subclass is indented under the class definition. Subject matter not provided for in any of the preceding subclasses of this class.

- (1) Note. This subclass also includes subject matter under the subclass in which the data processing is not clearly described as electrical or being performed by a computer.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 50, through 80 for business processing using cryptography.

FOREIGN ART COLLECTIONS

Parenthetical references in the titles below refer to the U.S. classifications from which these art collections are derived.

FOR 100 For cost/price:

Foreign art collection wherein the data processing system or calculating computer is designed for or utilized in determining charges for goods or services, or is utilized for the solution of a problem in this area.

FOR 101 Postage meter system:

Foreign art collection for determining cost associated with mailing an article.

FOR 102 Including mailed item weight:

Foreign art collection where the weight of the article to be mailed is used to determine the cost.

FOR 103 Utility usage:

Foreign art collection in which the cost reflects utility (e.g., electricity, gas, water) usage.

FOR 104 Fluid:

Foreign art collection wherein the goods are fluids.

FOR 105 Weight:

Foreign art collection wherein goods are weighed.

FOR 106 Distance or time (e.g., taximeters):

Foreign art collection wherein the cost is per unit of distance or unit of time.

FOR 124 Electronic funds transfer (e.g., automatic teller) (380/24):

Foreign art collection under the class definition which encrypts a signal for authorization, or authorization request (e.g., password), for credit or debit of funds to a customer's account.

END